

IN THE CLAIMS:

The following is a complete listing of the claims, and replaces all earlier version and listings.

1. (currently amended): A service management apparatus ~~for use in a~~ network system ~~capable of providing various services dispersed in a plurality of~~ apparatuses, ~~for~~ managing service information of ~~the various services present on the~~ network system a service provided by a service apparatus and transferring the managed service information to an external apparatus in response to a request from the external apparatus, said service management apparatus comprising:

test means for executing a process of a trial use of ~~one of the various~~ services ~~provided by one of the plurality of apparatuses~~ the service provided by the service apparatus, wherein, in ~~said the~~ trial use, said test means sends data to the service by using an operation of the service;

evaluation means for evaluating the quality of the service, based on a result of the trial use of the service executed by said test means; and

renewal means for renewing the managed service information based on the quality evaluated by said evaluation means.

2. (original): A service management apparatus according to claim 1, wherein said evaluation means evaluates the result of the trial use of the service executed by said test means by a predetermined evaluation function.

3. (original): A service management apparatus according to claim 2, wherein said renewal means deletes the managed service information in a case the evaluation by the predetermined evaluation function does not meet a predetermined reference.

4. (original): A service management apparatus according to claim 2, wherein the predetermined evaluation function evaluates the quality of the service based on the time required for calling the service.

5. (original): A service management apparatus according to claim 2, wherein the predetermined evaluation function evaluates the quality of the service based on an error frequency generated by a service calling.

6. (previously presented): A service management apparatus according to claim 1, wherein:

said test means executes an access process for writing data to a storage service and reading data from the storage service on a trial basis; and

said evaluation means evaluates the quality of the storage service based on the result of the access process performed by said test means.

7. (previously presented): A service management apparatus according to claim 1, wherein said evaluation means detects the number of colors or recording sheets available in an imaging service and evaluates the quality of the service based on the number of colors or recording sheets available in the service.

8. (currently amended): A service management apparatus according to claim 1, wherein the ~~plurality of apparatuses includes~~ service apparatus comprises a printer.

9. (currently amended): An apparatus connected to a service management apparatus for managing service information of ~~various services present~~ a service on a network system and transferring the managed service information to an external apparatus in response to a request from the external apparatus, said apparatus comprising:

test means for executing a process of a trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein, in ~~said the~~ trial use, ~~said test means sends data to~~ the service of the other apparatus is executed;

evaluation means for evaluating the quality of the service, based on a result of the trial use of the service executed by said test means; and

deletion means for instructing, in a case in which the quality evaluated by said evaluation means does not meet a predetermined reference, the service management apparatus to delete the service information related to said apparatus and to the other apparatus from the service management apparatus.

10. (currently amended): An apparatus connected to a service management apparatus for managing service information of ~~various services present~~ a service on a network system and transferring the managed service information to an external apparatus in response to a request from the external apparatus, said apparatus comprising:

test means for executing a process of the trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein in ~~said the~~ trial use, ~~said test means sends data to~~ an operation of the service of the other apparatus is executed;

evaluation means for evaluating the quality of the service, based on a result of the trial use of the service executed by said test means; and

substitution means for instructing, in a case the quality evaluated by said evaluation means does not meet a predetermined reference, the service management apparatus to substitute service information of the service provided by the another apparatus with ~~[[a]]~~ service information provided by said apparatus.

11. (currently amended): A service management method ~~for use~~ in a network system ~~capable of providing various services dispersed in a plurality of apparatuses, for~~ managing service information of ~~the various services present on the network system~~ a service provided by an apparatus and transferring the managed service information to an external apparatus in response to a request from the external apparatus, said service management method comprising:

a test step of executing a process of a trial use of ~~one of the various services provided by said service management method~~ the service provided by the apparatus, wherein, in ~~said the~~ trial use, said test means sends data to the service by using an operation of the service;

an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed in said test step; and

a renewal step of renewing the managed service information based on the quality evaluated in said evaluation step.

12. (original): A service management method according to claim 11, wherein said evaluation step includes evaluating the result of the trial use of the service executed in said test step by a predetermined evaluation function.

13. (original): A service management method according to claim 12, wherein said renewal step includes deleting the managed service information in a case the evaluation by the predetermined evaluation function does not meet a predetermined reference.

14. (original): A service management method according to claim 12, wherein the predetermined evaluation function evaluates the quality of the service based on the time required for calling the service.

15. (original): A service management method according to claim 12, wherein the predetermined evaluation function evaluates the quality of the service based on an error frequency generated by a service calling.

16. (previously presented): A service management method according to claim 11, wherein:

said test step includes executing an access process for writing data to a storage service and reading data from the storage service on a trial basis; and

said evaluation step includes evaluating the quality of the storage service based on the result of the access process performed in said test step.

17. (previously presented): A service management method according to claim 11, wherein said evaluation step includes detecting the number of colors or recording sheets available in an imaging service and evaluates the quality of the imaging service based on the number of colors or recording sheets available in the imaging service.

18. (previously presented): A service management method according to claim 11, wherein the plurality of apparatuses includes a printer.

19. (currently amended): A method for use in an apparatus connected to a service management apparatus for managing service information of ~~various services~~ present a service on a network system and transferring the managed service information to an external apparatus in response to a request from the external apparatus, said method comprising:

a test step of executing a process of a trial use of a service of another apparatus belonging to a same group as that of ~~said the~~ the apparatus, wherein in the trial use, ~~data are sent to the service of the other apparatus is executed;~~

an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed in said test step; and

a deletion step of instructing, in a case in which the quality evaluated in said evaluation step does not meet a predetermined reference, the service management

apparatus to delete the service information related to the apparatus and to the other apparatus from the service management apparatus.

20. (currently amended): A method for use in an apparatus connected to a service management apparatus for managing service information of ~~various services~~ present a service on a network system and transferring the managed service information to an external apparatus in response to a request from the external apparatus, said apparatus comprising:

a test step of executing a process of the trial use of a service of another apparatus belonging to a same group as that of ~~said the~~ the apparatus, wherein in the trial use, ~~data are sent to~~ an operation of the service of the other apparatus is executed;

an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed in said test step; and

a substitution step of instructing, in a case in which the quality evaluated in said evaluation step does not meet a predetermined reference, the service management apparatus to substitute service information of the service provided by the ~~[[an]]~~ other apparatus with ~~[[a]]~~ service information provided by ~~said the~~ the apparatus.

21. (currently amended): A computer readable storage medium storing a program for executing a service management method ~~for use~~ in a network system ~~capable of providing various services dispersed in a plurality of apparatuses,~~ for managing service information of the various services present on the network system a service provided by an apparatus and transferring the managed service information to an external apparatus in response to a request from the external apparatus, said program comprising:

code for a test step of executing a process of a trial use of ~~one of the various services provided by said service management method~~ the service provided by the apparatus, wherein, in the trial use, data are sent to the service by using an operation of the service;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a renewal step of renewing the managed service information based on the quality evaluated by execution of said code for an evaluation step.

22. - 28. (canceled).

29. (currently amended): A computer readable storage medium storing a program executing a method for use in an apparatus connected to a service management apparatus for managing service information of ~~various services present~~ a service on a network system and transferring the managed service information to an external apparatus in response to a request from the external apparatus, said ~~apparatus~~ program comprising:

code for a test step of executing a process of a trial use of a service of another apparatus belonging to a same group as that of ~~said the~~ the apparatus, wherein, in the trial use, ~~data are sent to the service~~ of the other apparatus is executed;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a deletion step of instructing, in a case in which the quality evaluated by execution of said code for an evaluation step does not meet a predetermined



reference, the service management apparatus to delete the service information related to the apparatus and to the other apparatus from the service management apparatus.

30. (currently amended): A computer readable storage medium storing a program executing a method for use in a first apparatus connected to a service management apparatus for managing service information of ~~various services present~~ a service on a network system and transferring the managed service information to an external apparatus in response to a request from the external apparatus, said program comprising:

code for a test step of executing a process of the trial use of a service of another apparatus belonging to a same group as that of the first apparatus, wherein in the trial use, ~~data are sent to~~ an operation of the service of the other apparatus is executed;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed in the test step; and

code for a substitution step of instructing, in a case in which the quality evaluated in the evaluation step does not meet a predetermined reference, the service management apparatus to substitute service information of the service provided by the other apparatus with ~~[[a]] service~~ information provided by the first apparatus.

31. (currently amended): A computer program executing a service management method ~~for use in a network system capable of providing various services dispersed in a plurality of apparatuses,~~ for managing service information of ~~various services present on the network system~~ a service provided by an apparatus and transferring the managed service information to an external apparatus in response to a request from the external apparatus, said program comprising:

code for a test step of executing a process of a trial use of ~~one of the various~~  
~~services provided by said service management method~~ the service provided by the  
apparatus, wherein, in said the trial use, data are sent to the service by using an operation of  
the service;

code for an evaluation step of evaluating the quality of the service, based on  
a result of the trial use of the service executed by said code for a test step; and

code for a renewal step of renewing the managed service information based  
on the quality evaluated by said code for an evaluation step.

32.- 38. (canceled).

39. (currently amended): A computer program executing a method for use  
in an apparatus connected to a service management apparatus for managing service  
information of ~~various services present~~ a service on a network system and transferring the  
managed service information to an external apparatus in response to a request from the  
external apparatus, said program comprising:

code for a test step of executing a process of a trial use of a service of  
another apparatus belonging to a same group as that of ~~said the~~ the apparatus, wherein, in the  
trial use, ~~data are sent to the service~~ of the other apparatus is executed;

code for an evaluation step of evaluating the quality of the service, based on  
a result of the trial use of the service executed by said code for a test step; and

code for a deletion step for instructing, in a case in which the quality  
evaluated by said code for an evaluation step does not meet a predetermined reference, the

service management apparatus to delete the service information related to the apparatus and to the other apparatus from the service management apparatus.

40. (currently amended): A computer program executing a method for use in a first apparatus connected to a service management apparatus for managing service information of various services present on a network system and transferring the managed service information to an external apparatus in response to a request from the external apparatus, said program comprising:

code for a test step of executing a process of the trial use of a service of another apparatus belonging to a same group as that of said apparatus, wherein, in the trial use, ~~data are sent to~~ an operation of the service of the other apparatus is executed;

code for an evaluation step of evaluating the quality of the service, based on a result of the trial use of the service executed by said code for a test step; and

code for a substitution step of instructing, in a case in which the quality evaluated by said code for an evaluation step does not meet a predetermined reference, the service management apparatus to substitute service information of the service provided by the ~~the~~ other apparatus with ~~the~~ service information provided by the first apparatus.

41. (previously presented): A service management apparatus according to claim 1, wherein said test means, in the trial use, sends a service request to the one service and receives a response from the one service after the service executes a predetermined process in the one apparatus.

42. (previously presented): A service management apparatus according to claim 9, wherein said test means, in the trial use, sends a service request to the one service and receives a response from the one service after the service executes a predetermined process in the one apparatus.

43. (previously presented): A service management apparatus according to claim 10, wherein said test means, in the trial use, sends a service request to the one service and receives a response from the one service after the service executes a predetermined process in the one apparatus.

44. (previously presented): A service management method according to claim 11, wherein said test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

45. (previously presented): A service management method according to claim 19, wherein said test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

46. (previously presented): A service management method according to claim 20, wherein said test step includes, in the trial use, sending a service request to the one service and receiving a response from the one service after the service executes a predetermined process in the one apparatus.

47. - 52. (canceled).